

June 2023 Climate Summary for Denver

Another Cool & Wet Month



Low clouds & light rain partially obscure the Flatirons near Boulder on June 16th

Persistent upper level troughiness over the Intermountain-West combined with plenty of Gulf moisture and occasional upper level shortwaves moving across the region resulted in cool and wet weather across North Central and Northeastern Colorado for the first 17 days of June. Warmer and drier weather moved into the area on the 18th and continued through the 20th as upper level ridging and a dry southwesterly flow aloft set up over the state. Increased moisture, shear and instability behind the passage of a cold front led to scattered to numerous strong to severe storms across the plains during the afternoon and evening of the 21st with more strong to severe storms affecting southern Metro Denver, the Palmer Divide and the Southern Foothills on the 22nd. Denver experienced warm and dry weather from the 23rd through the 28th with another round of strong to severe storms on the 29th and 30th.

Temperatures :

The average temperature at Denver International Airport for the month was 64.2 degrees F, which is 4.0 degrees below normal. The warmest June on record occurred in 2012 with an average monthly temperature of 75.0 degrees f. The coldest June on record was 60.6 degrees back in 1967. There was only 1 day during the month in which the temperature reached or exceeded the 90 degree mark. This is the fewest 90 degree days for June since 2009 when no 90 degree days were recorded.

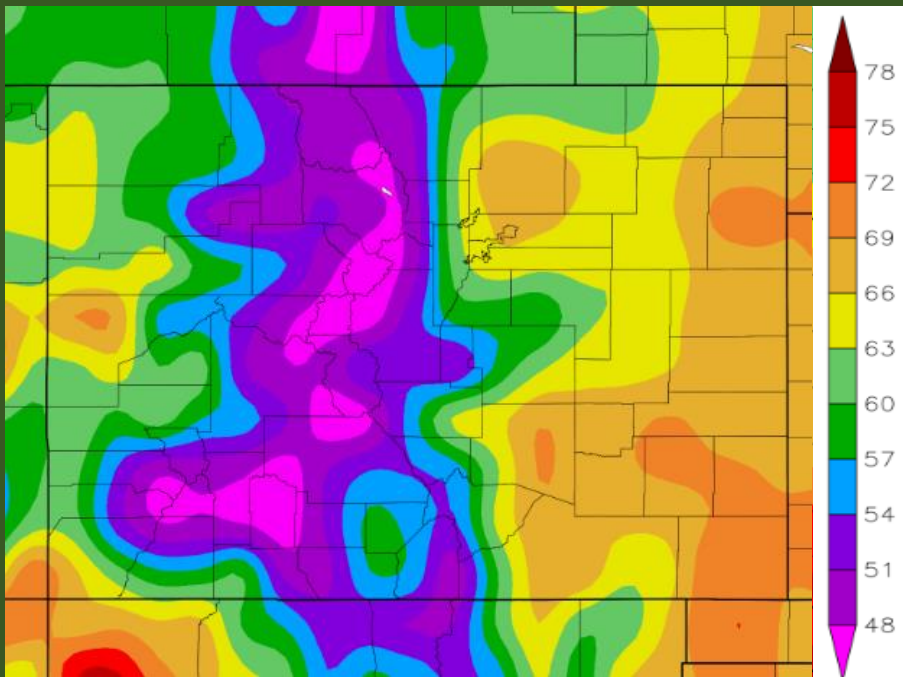
Ten Warmest June`s in Denver Weather History Since 1872:

- 75.0 2012
- 73.5 1994
- 73.4 1956
- 72.8 2006...1933
- 72.6 1990
- 72.0 1952...1881
- 71.9 1980...1977

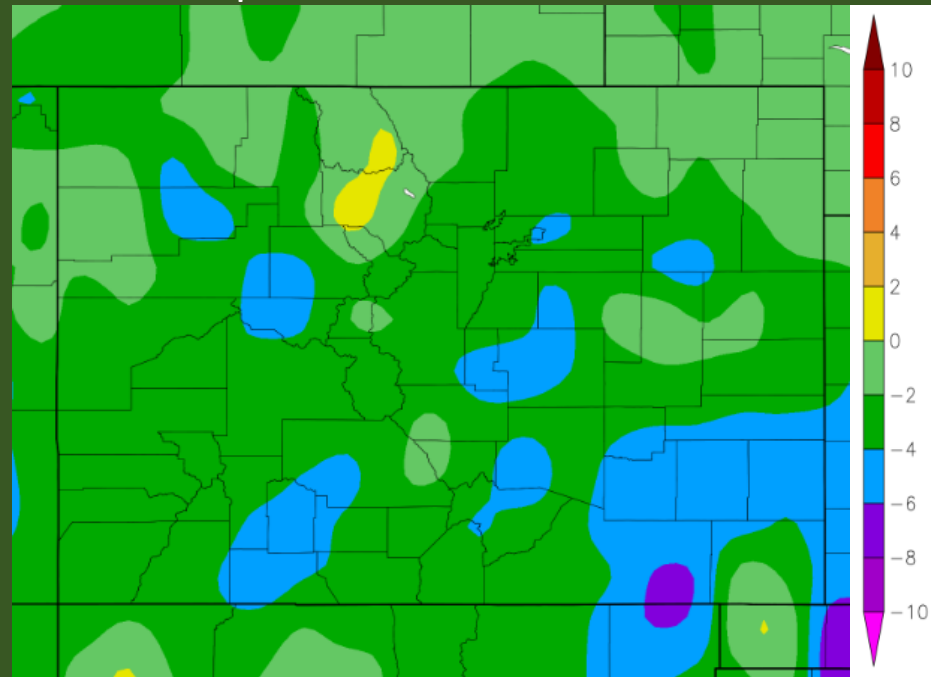
Ten Coldest June`s in Denver Weather History Since 1872:

- 60.6 1967
- 60.9 1951
- 61.0 1928
- 61.5 1969...1904
- 61.7 1895
- 62.0 1945
- 62.1 2003...1915
- 62.2 1995

Average Temperature
June 2023 (°F)



June 2023 Temperature
Departure from Normal (°F)



Graphics generated by HPRCC using provisional data

Precipitation:

Precipitation for the month of June at Denver International Airport was 6.10 inches, which is much above the normal of 1.94 inches. This makes June 2023, the wettest June in Denver Weather History and the 6th wettest month of all time since records have been taken way back in 1872. There were 15 days with measurable precipitation during the month. The 1.85 inches of precipitation that fell on the 21st is the greatest daily amount for the month. This amount shattered the precipitation record for the date which previously was 0.85 inches way back in 1947. No snow fell during the month.

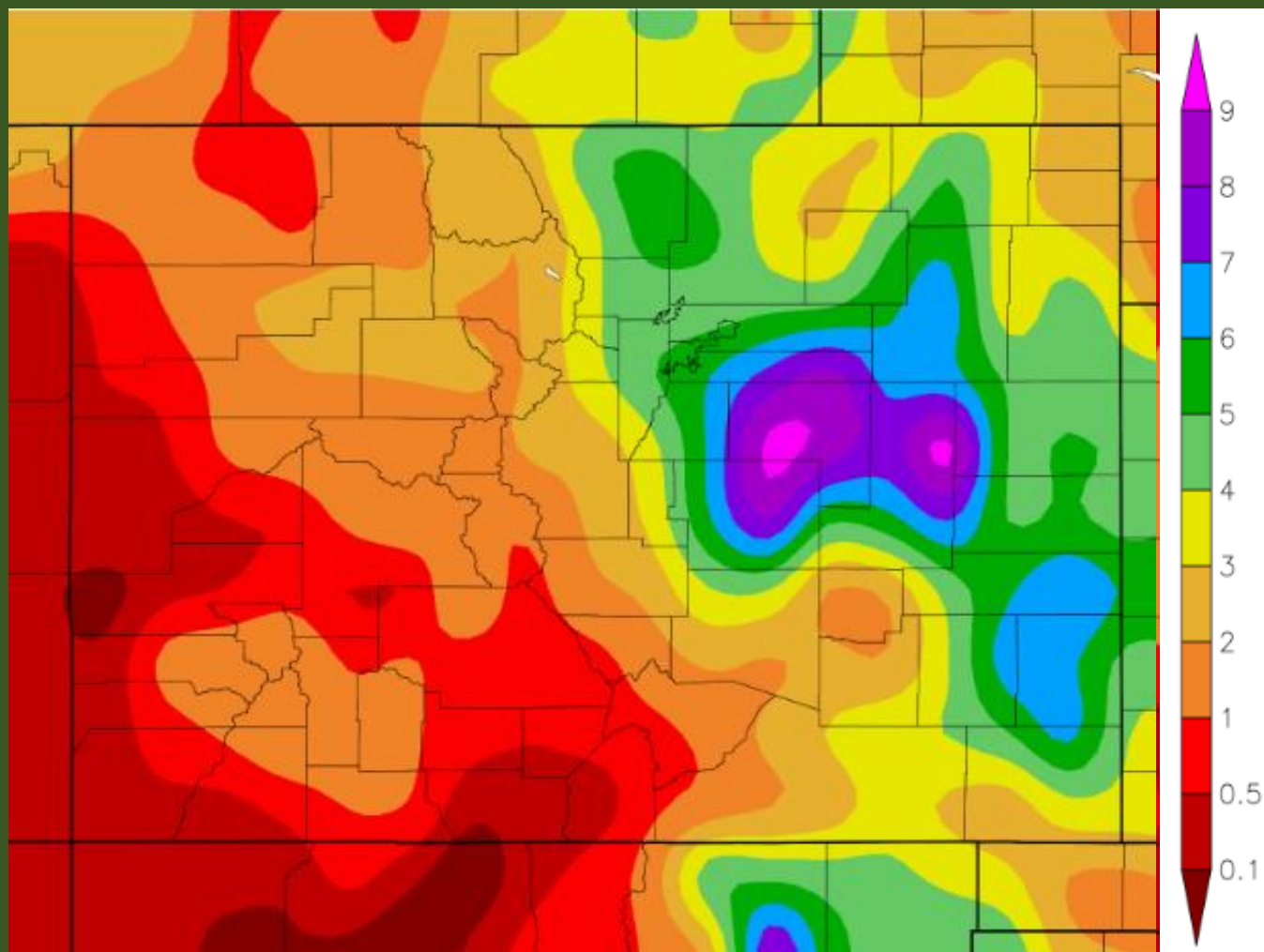
Ten Wettest June`s in Denver Weather History Since 1872:

6.10 inches 2023
4.96 inches 1882
4.86 inches 2009
4.69 inches 1967
4.14 inches 1965
3.99 inches 2005
3.95 inches 2003...1949
3.83 inches 1970
3.59 inches 1963

Ten Driest June`s in Denver Weather History Since 1872:

Trace 1890
0.08 inches 1916
0.09 inches 1980...1881
0.12 inches 2006...1952
0.13 inches 1893
0.16 inches 1933
0.17 inches 1930
0.19 inches 1922

June 2023 Precipitation (Inches)



Graphic generated by HPRCC using provisional data

Record Monthly Rainfall

6.10"

Previous Record:
4.96" in 1882

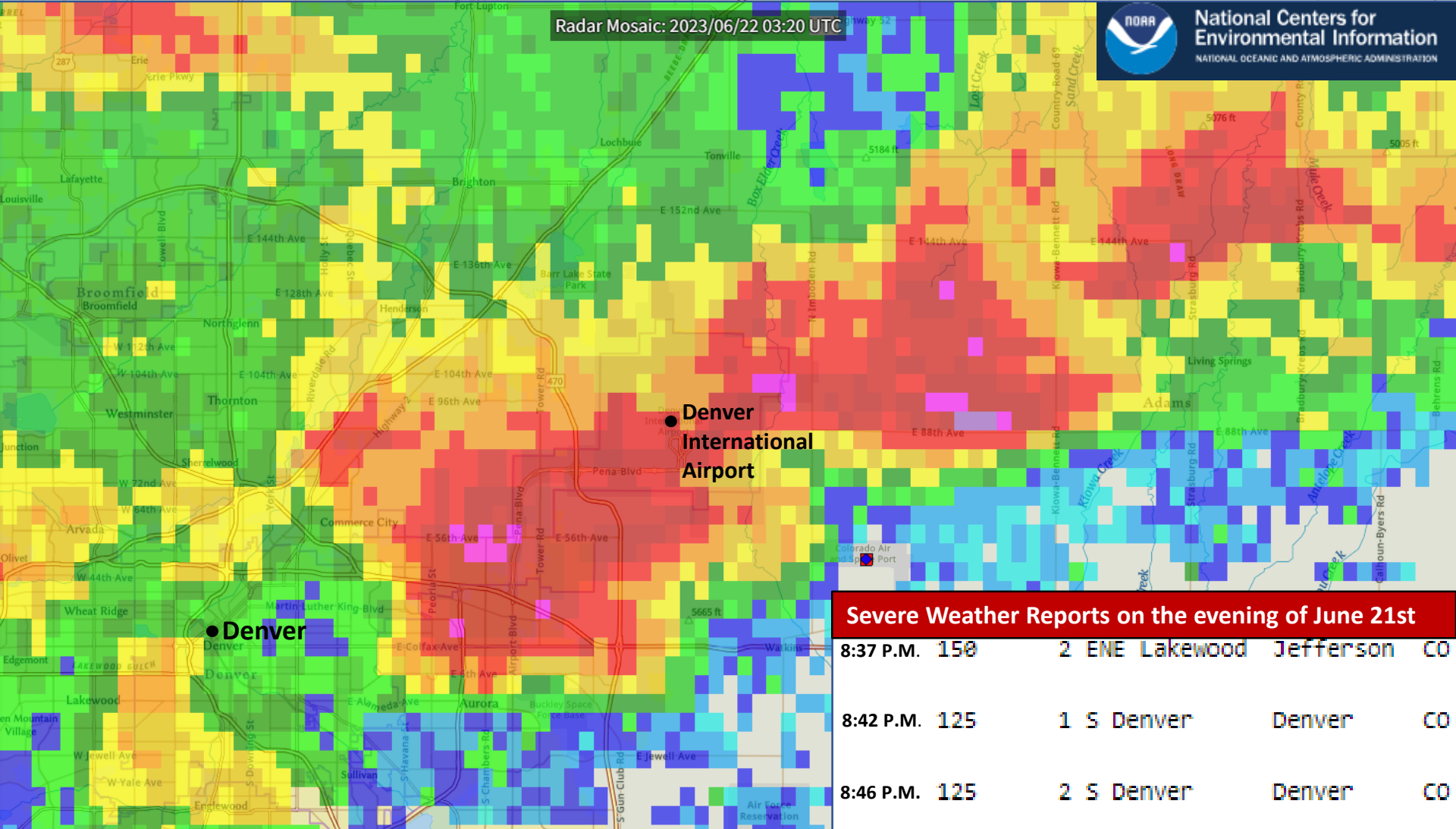
6th Wettest Month All Time
(records began 1872)

May 1876	8.57"
April 1900	8.24"
May 1957	7.31"
July 1965	6.41"
May 1969	6.12"

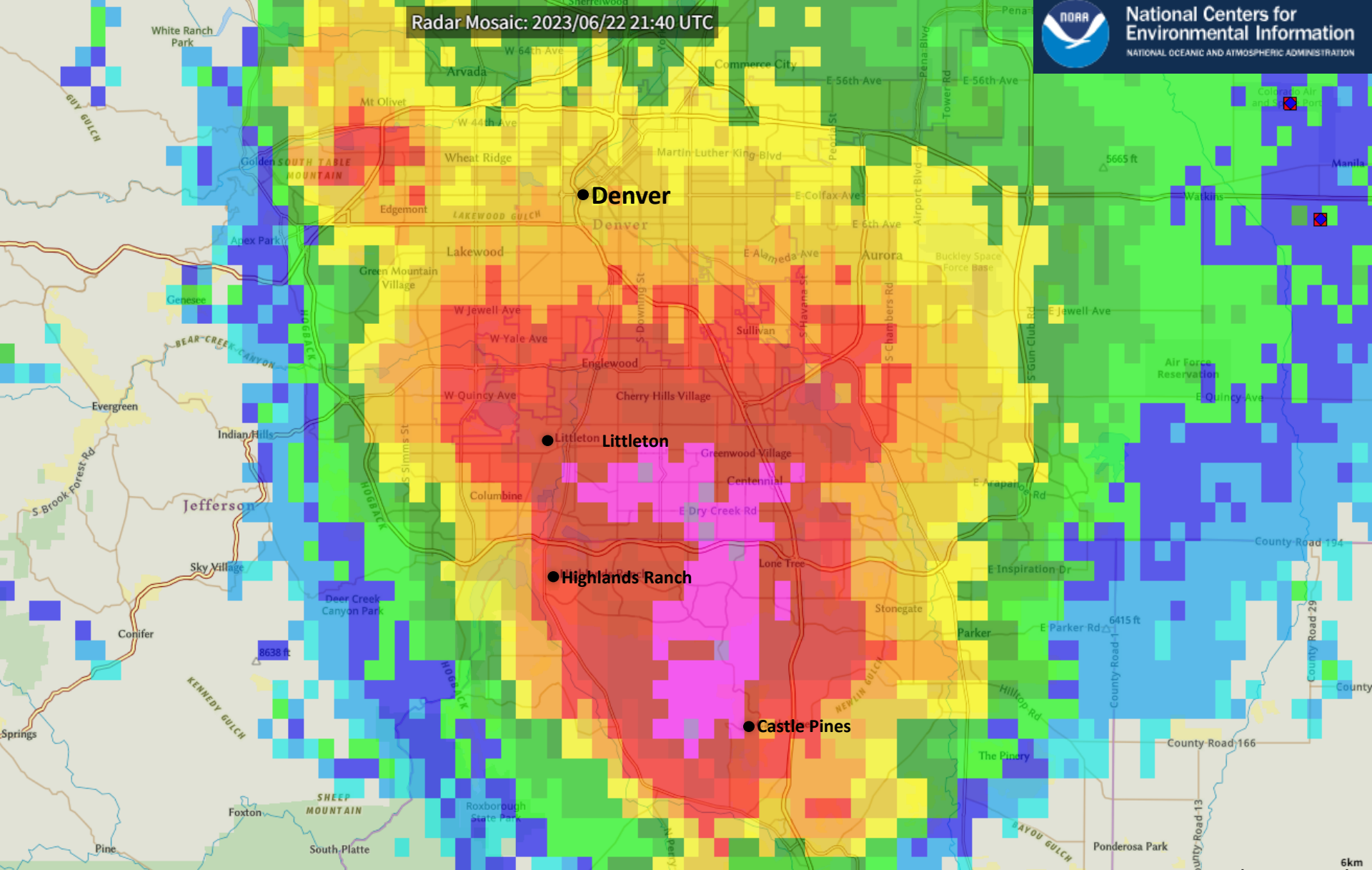


NATIONAL WEATHER SERVICE
OCEANIC AND ATMOSPHERIC ADMINISTRATION

Station	June, 2023 Precipitation	All Time Wettest June Rank	All Time Wettest Month	Records began
Akron	7.48"	1st	2nd	1937
Limon	7.04"	1st	4th	1948
Fort Collins CSU	5.61"	4th	26th	1893
Boulder	5.04"	4th	44th	1893
Greeley UNC	4.50"	1st	13th	1967
Julesburg	1.96"	Driest third	??	1912



On the evening of June 21st, strong to severe storms with heavy rain and large hail moved across Metro Denver. Some areas of Eastern Denver and Northern Aurora measured over 2.50" of rain with some portions of Metro Denver and the southern foothills seeing large hail ranging between 1.00" and 1.75" in diameter.



On the afternoon of June 22nd, strong to severe storms with heavy rain & large hail moved across the southern foothills, Central & Southern Denver & the Palmer Divide. Some portions of Denver, Aurora & the Palmer Divide measured over 2 inches of rain with just over 3 inches of rain 6 miles south-southwest of Elizabeth. Hail up to 2.00 inches in diameter was measured near Columbine with baseball size hail 2 miles north-northwest of Indian Hills. An automated weather station near Lone Tree measured a wind gust of 76 mph with the storm. The storms also produced an EF-1 Tornado that tracked from Highlands Ranch across Northern Douglas County.

Track of the Highlands Ranch Tornado June 22nd, 2023



Tornado - Highlands Ranch
Douglas County

Date	June 22, 2023
Time (Local)	324 pm to 350 pm
EF Rating	EF1
Est. Peak Winds	105 mph
Path Length	8.36 miles
Max Width	50 yards
Injuries/Deaths	None

The Enhanced Fujita (EF) Scale classifies tornadoes into the following categories:

EF0
Weak
65-85 mph

EF1
Moderate
86-110 mph

EF2
Significant
111-135 mph

EF3
Severe
136-165 mph

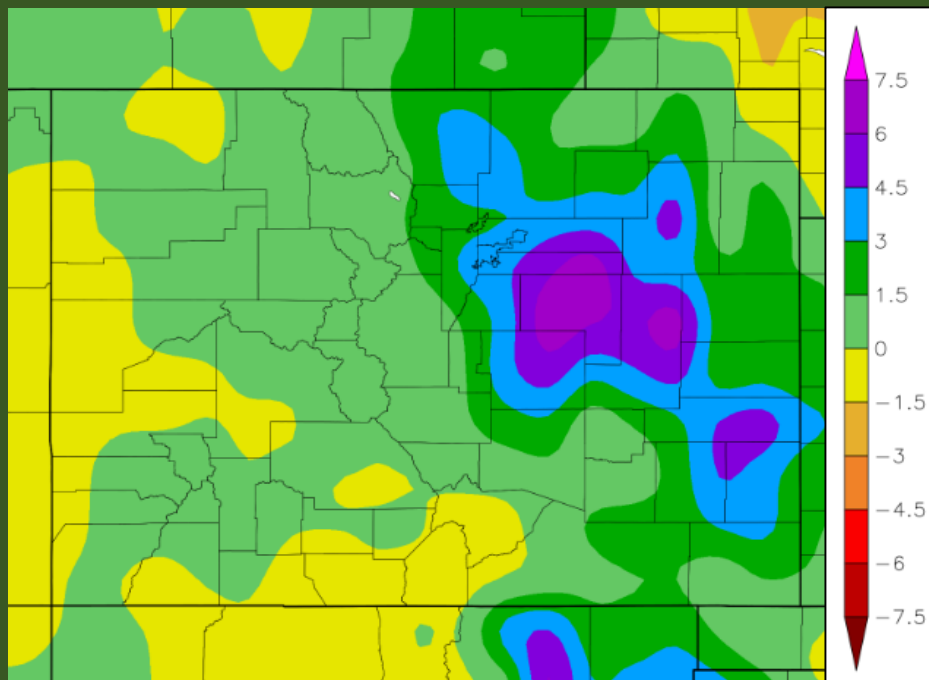
EF4
Extreme
166-200 mph

EF5
Catastrophic
200+ mph

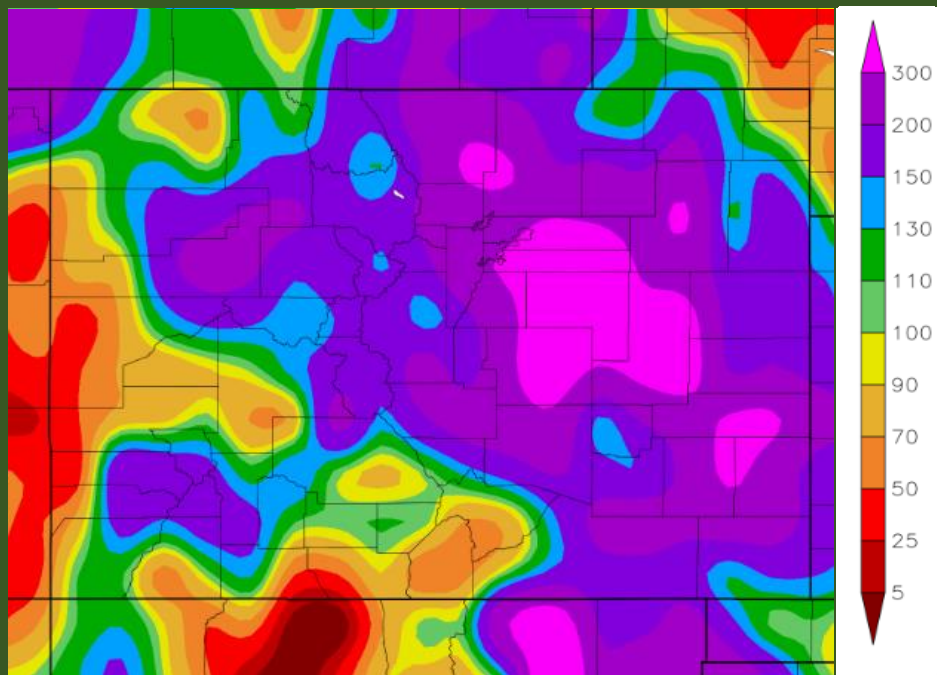


On Thursday afternoon, June 22, a tornado touched down just south of CO-470 in Douglas County, west of Lucent Blvd, impacting the city of Highlands Ranch. The tornado looks to have lifted just west of I-25 in Lone Tree, CO. The damage track, start/stop times, and EF- rating are the culmination of numerous photos, videos, and other reports. NWS Boulder's survey team looked at the damage the morning of June 23 and found instances of high end EF-1 damage. There have also been several damage reports (mainly trees down) 1 mile or further south of the track, which are likely due to straight line winds from the rear flank downdraft, a typical occurrence with many tornadoes. Most all of the damage along the path and in the rear flank downdraft is EF-0, but at least 5 damage indicators of EF-1 were identified.

Departure from Normal Precipitation
June 2023 (Inches)



Percent of normal Precipitation (%)
June 2023



Graphics generated by HPRCC using provisional data

Six snowiest June`s in Denver Weather History Since 1872:

0.4 inches 1919

0.3 inches 1951

Trace 1974...1947...1937...1917

There were 18 days in which thunder was observed at Denver International Airport and no days with dense fog with a visibility at or below 1/4 mile during the month. The peak wind gust of 52 mph from the southwest occurred on the 8th.